WHAT IS CLAIMED IS:

1. A head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a helmet;

a connection structure; and

at least one resisting member positioned between and connected to the helmet and the connection structure, wherein the at least one resisting member generates a reaction force that substantially opposes a crash impact force to yield a reduced net force on the head.

2. The system of claim 1, wherein the helmet includes a mounting device for connecting to one end of the at least one resisting member.

3. The system of claim 2, wherein the mounting device is a bracket.

4. The system of claim 1, wherein the connection structure is a shoulder/chest plate.

5. The system of claim 1, wherein the connection structure is a portion of a vehicle.

6. The system of claim 5, wherein the connection structure is a safety harness.

7. The system of claim 1, wherein the at least one resisting member is a dashpot.

8. The system of claim 1, wherein the at least one resisting member is a magneto-rheological fluid-based dashpot.

9. The system of claim 1, wherein the at least one resisting member is an electro-rheological fluid-based dashpot.

10. The system of claim 1, wherein the at least one resisting member is a tether.

11. The system of claim 1, further comprising two resisting members.

12. The system of claim 1, further comprising four resisting members.

13. The system of claim 1, further comprising a rolling harness connector for connecting one end of the at least one resisting member to the connection structure.

14. The system of claim 1, further comprising a sliding harness connector for connecting one end of the at least one resisting member to the connection structure.

15. A head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a resisting member having first and second ends;

a helmet mount connector for connecting the resisting member to a helmet, the helmet mount being attached to the first end of the resisting member; and

a movable harness connector for connecting a safety harness of a vehicle to the resisting member, the harness connector being attached to the second end of the resisting member.

16. The system of claim 15, wherein the resisting member is a dashpot.

17. The system of claim 15, wherein the resisting member is a tether.

18. The system of claim 15, wherein the resisting member is a magneto-rheological fluid-based dashpot.

19. The system of claim 15, wherein the resisting member is an electro-rheological fluid-based dashpot.

20. The system of claim 15, further comprising a helmet having a mounting device connectable to the helmet mount connector.

21. The system of claim 15, wherein the movable harness connector is a rolling harness connector.

22. The system of claim 15, wherein the movable harness connector is a slidable harness connector.

23. The system of claim 22, further comprising a second resisting member, wherein the slidable harness connector includes means for connecting to an end of the second resisting member.

24. A head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a helmet; and

means for generating a reaction force that substantially opposes a crash impact force to yield a reduced net force on the head.

25. The system of claim 24, wherein the means includes at least one resisting member.

26. The system of claim 24, wherein the means includes at least one dashpot.

27. The system of claim 24, wherein the means includes at least one tether.

28. The system of claim 24, wherein the means is automatically adjustable.

29. The system of claim 28, wherein the means includes at least one magneto-rheological fluid-based dashpot.

30. The system of claim 28, wherein the means includes at least one electro-rheological fluid-based dashpot.

31. The system of claim 24, further comprising a connection structure.

32. The system of claim 31, wherein the connection structure is a shoulder/chest plate to be worn on the wearer's body.

33. The system of claim 31, wherein the connection structure is a portion of a vehicle.

34. The system of claim 31, wherein the connection structure is a safety harness of a vehicle.

35. An automatically adjustable head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a helmet;

a connection structure;

means for continuously monitoring a status of a vehicle and/or driver; and

at least one dashpot containing a controllable rheological fluid, the at least one dashpot positioned between and connected to the helmet and the connection structure, wherein the viscosity of the rheological fluid in the dashpot automatically changes in response to or in anticipation of a change in a load being applied to the helmet and head of the wearer.

36. The system of claim 35, wherein the connection structure is part of the vehicle.

37. The system of claim 35, wherein the connection structure is a safety harness.

38. The system of claim 35, wherein the controllable rheological fluid is magneto-rheological fluid.

39. The system of claim 35, wherein the controllable rheological fluid is electro-rheological fluid.

40. The system of claim 35, further comprising two dashpots containing a controllable rheological fluid.

41. The system of claim 35, further comprising four dashpots containing a controllable rheological fluid.

42. The system of claim 35, further comprising a rolling harness connector connecting one end of the dashpot to the connection structure.

43. The system of claim 35, wherein the means for continuously monitoring includes an accelerometer.

44. The system of claim 35, wherein the means for continuously monitoring includes a yaw sensor.

45. The system of claim 35, wherein the means for continuously monitoring includes a global positioning system.

46. An automatically adjustable head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a bladder positionable around a wearer's neck and containing a controllable rheological, wherein the viscosity of the rheological fluid in the bladder automatically changes based on changes in a load being applied to the head of the wearer.

47. The system of claim 46, further comprising a helmet connected to a top portion of the bladder.

48. The system of claim 47, further comprising a shoulder/chest plate connected to a bottom portion of the bladder.

49. The system of claim 46, wherein the bladder generates a reaction force that substantially opposes a crash impact force to yield a reduced net force on the head.

50. A method of automatically limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

providing an occupant of a moving vehicle with a system comprising:

a helmet,

a connection structure,

means for continuously monitoring a status of a vehicle and/or driver, and

at least one dashpot containing a controllable rheological fluid, the at least one dashpot positioned between and connected to the helmet and the connection structure, wherein the viscosity of the rheological fluid in the dashpot automatically changes in response to or in anticipation of a change in a load being applied to the helmet and head of the wearer;

continuously monitoring the status of at least one of the vehicle and the occupant; and

automatically changing the viscosity of the rheological fluid in the dashpot in response to changes in the status.

51. The method of claim 50, wherein the rheological fluid is magneto-rheological fluid, and wherein automatically changing the viscosity includes applying a magnetic field to the fluid.

52. The method of claim 50, wherein the rheological fluid is electro-rheological fluid, and wherein automatically changing the viscosity includes applying a charge to the fluid.

53. A method of automatically limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

providing an occupant of a moving vehicle with a system comprising a bladder positionable around a wearer's neck and containing a controllable

rheological, wherein the viscosity of the rheological fluid in the bladder automatically changes based on changes in a load being applied to the head of the wearer;

continuously monitoring the status of at least one of the vehicle and the occupant; and

automatically changing the viscosity of the rheological fluid in the dashpot in response to changes in the status.

54. The method of claim 53, wherein the rheological fluid is magneto-rheological fluid, and wherein automatically changing the viscosity includes applying a magnetic field to the fluid.

55. The method of claim 53, wherein the rheological fluid is electro-rheological fluid, and wherein automatically changing the viscosity includes applying a charge to the fluid.

56. A head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

a helmet having an upper portion and a lower portion connected via a hinge; and

at least one resisting member having a first end connected to the upper portion of the helmet and having a second end connected to the lower portion of the helmet, wherein the at least one resisting member generates a reaction force that substantially opposes a crash impact force to yield a reduced net force on the head.

57. The system of claim 56, wherein the at least one resisting member is a dashpot.

58. The system of claim 56, wherein the at least one resisting member is a magneto-rheological fluid-based dashpot.

59. The system of claim 56, wherein the at least one resisting member is an electro-rheological fluid-based dashpot.

60. The system of claim 56, further comprising two resisting members.

61. A method of adapting a helmet to be used with a head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, the head stabilizing system including a connection structure and at least one resisting member to be positioned between and connected to the helmet and the connection structure, comprising:

providing a conventional helmet;

providing at least one bracket configured to connect to the at least one resisting member; and

attaching the at least one bracket to a surface of the helmet with an adhesive.

62. The method of claim 61, wherein attaching the at least one bracket includes using an aerospace-grade binary bonding agent.

63. The method of claim 62, wherein the aerospace-grade binary bonding agent a minimum shear strength of 1,000 pounds per square inch.

64. The method of claim 61, wherein attaching the at least one bracket does not alter the structure of the helmet.

65. The method of claim 61, wherein attaching the at least one bracket does not require altering the surface of the helmet.

66. The method of claim 61, wherein providing the conventional helmet includes providing a certified helmet.

67. The method of claim 66, wherein attaching the at least one bracket does not affect certification of the helmet.

68. The method of claim 61, further comprising attaching two brackets to the helmet.

69. The method of claim 61, further comprising attaching three brackets to the helmet.

70. The method of claim 61, wherein attaching the at least one bracket includes attaching the at least one bracket to a back portion of the helmet.

71. The method of claim 61, wherein attaching the at least one bracket includes attaching the at least one bracket to a side portion of the helmet.

72. The method of claim 61, wherein attaching the at least one bracket includes attaching a first bracket to a first side portion of the helmet and attaching a second bracket to a second, opposite side portion of the helmet.

73. A method of adapting a racing helmet to be used with a head stabilizing system for limiting the load acting on a wearer's head and generated by displacement, velocity, or acceleration of the wearer's head with respect to the wearer's body, comprising:

providing a conventional racing helmet; and

gluing at least one bracket to a surface of the helmet.

74. The method of claim 73, wherein gluing the at least one bracket includes using an aerospace-grade binary bonding agent.

75. The method of claim 74, wherein the aerospace-grade binary bonding agent a minimum shear strength of 1,000 pounds per square inch.

76. The method of claim 73, wherein gluing the at least one bracket does not alter the structure of the helmet.

77. The method of claim 73, wherein gluing the at least one bracket does not require altering the surface of the helmet.

78. The method of claim 73, wherein providing the conventional racing helmet includes providing a SNELL-certified helmet.

79. The method of claim 78, wherein gluing the at least one bracket does not affect the certification of the helmet.

80. The method of claim 73, further comprising gluing two brackets to the helmet.

81. The method of claim 73, further comprising attaching three brackets to the helmet.

82. The method of claim 73, wherein gluing the at least one bracket includes gluing the at least one bracket to a back portion of the helmet.

83. The method of claim 73, wherein gluing the at least one bracket includes gluing the at least one bracket to a side portion of the helmet.

84. The method of claim 73, wherein gluing the at least one bracket includes gluing a first bracket to a first side portion of the helmet and gluing a second bracket to a second, opposite side portion of the helmet.